15. (Three Times Amended) An optical amplifier comprising: an input terminal receiving an optical input signal;

an optical coupler dividing the optical input signal into a first optical signal and a second optical signal;

an optical filter operatively connected to the optical coupler for passing the first optical input signal, and for ascertaining a level of the optical input signal through a detector; said detector being operatively connected to the optical filter for receiving the first optical signal passed through the optical filter to detect the level of the optical input signal; and

an optical fiber amplifier formed with erbium operatively connected to the optical coupler for amplifying the second optical signal with excitation by an exciting light.

16. (Three Times Amended) An optical amplifier comprising: an input terminal receiving an optical input signal;

an optical coupler dividing the optical input signal into a first optical signal and a second optical signal;

an optical filter operatively connected to the optical coupler for passing the first optical signal, blocking an exciting light, which exists along with the first optical signal, and for ascertaining a level of the optical input signal through a detector; said detector being operatively connected to the optical filter for receiving the first optical signal passed through the optical filter to detect the level of the optical input signal; and

an optical fiber amplifier formed with erbium operatively connected to the optical coupler for amplifying the second optical signal with excitation by the exciting light.